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FILE COVERS 1907 - 5 Mar 2003 VOL 138 ISS 10
 FILE LAST UPDATED: 4 Mar 2003 (20030304/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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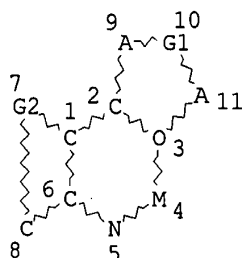
L5

SCR 1988 OR 1984 OR 1957

L7

STR

screens for group III + IV + Lanthanides



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NSPEC IS R AT 8

DEFAULT MLEVEL IS ATOM

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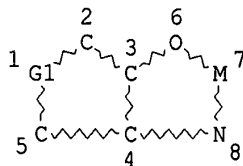
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NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L8

STR



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GRAPH ATTRIBUTES:
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 NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L10 55 SEA FILE=REGISTRY SSS FUL (L7 OR L8) AND L5
 L12 18 SEA FILE=HCAPLUS ABB=ON L10

18 CA references

=> D L12 ALL 1-18 HITSTR

L12 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:747859 HCAPLUS

DN 135:289200

TI Ether-amine ligand/metal complex polymerization catalysts, compositions, and use for olefin polymerization

IN Goh, Christopher; Diamond, Gary M.; Murphy, Vince; Leclerc, Margarete K.; Hall, Keith; Lapointe, Anne M.; Boussie, Thomas R.; Lund, Cheryl; Uno, Tetsuo

PA Symyx Technologies, Inc., USA

SO PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C08F004-00

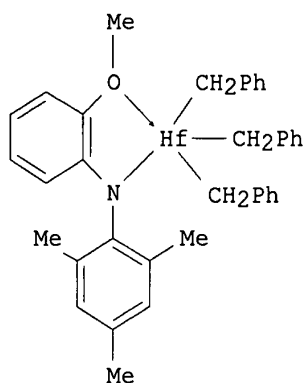
CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 29

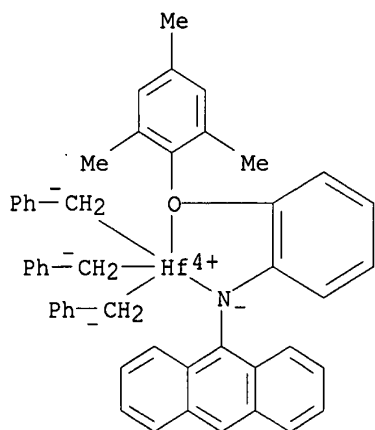
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074910	A2	20011011	WO 2001-US11015	20010404
WO 2001074910	A3	20020214		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002049288	A1	20020425	US 2001-825746	20010403
EP 1272537	A2	20030108	EP 2001-923150	20010404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI US 2000-194650P	P	20000404		
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OS MARPAT 135:289200				
GI				

applicants

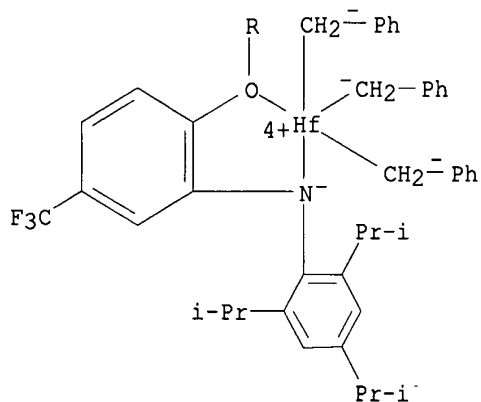


- AB Catalysts comprise metal-ligand complexes or compns. of metal precursors and ligands (and optionally activators) that catalyze polymn. and copolymn. reactions, particularly with monomers that are olefins, diolefins or acetylenically unsatd. monomers. These compns. can also polymerize monomers that have polar functionalities. Thus, C₂H₄ and 1-octene were polymd. at 130.degree. for 1 h in the presence of AlEt₃, dimethylanilinium tetrakis(pentafluorophenyl)borate activator, and complex I (2 .mu.mol Hf) to give 109 mg 71:29 copolymer.
- ST hafnium arom ether amine ligand complex polymn catalyst; ethylene octene copolymer catalyst
- IT Polymerization catalysts
(ether-amine ligand/metal complex polymn. catalyst for olefin polymn.)
- IT 118612-00-3, Dimethylanilinium tetrakis(pentafluorophenyl)borate
RL: CAT (Catalyst use); USES (Uses)
(activator; ether-amine ligand/metal complex polymn. catalyst for olefin polymn.)
- IT 100-99-2, uses 1070-00-4, Tri-n-octylaluminum 1191-15-7, Diisobutylaluminum hydride 219863-12-4 **365424-70-0**
365424-72-2 **365424-74-4** 365424-76-6 365424-78-8
365424-81-3 **365424-82-4** **365424-84-6**
365424-86-8 365424-88-0 365424-89-1 **365424-90-4**
365424-91-5 **365424-92-6**
RL: CAT (Catalyst use); USES (Uses)
(ether-amine ligand/metal complex polymn. catalyst for olefin polymn.)
- IT **365424-93-7P**
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(ether-amine ligand/metal complex polymn. catalyst for olefin polymn.)
- IT 9003-07-0P, Polypropylene 26221-73-8P, Ethylene-1-octene copolymer
RL: IMF (Industrial manufacture); PREP (Preparation)
(ether-amine ligand/metal complex polymn. catalyst for olefin polymn.)
- IT **365424-70-0** **365424-74-4** **365424-82-4**
365424-84-6 **365424-86-8** **365424-90-4**
365424-91-5 **365424-92-6**
RL: CAT (Catalyst use); USES (Uses)
(ether-amine ligand/metal complex polymn. catalyst for olefin polymn.)
- RN 365424-70-0 HCAPLUS
- CN Hafnium, tris(phenylmethyl) [N-[2-(2,4,6-trimethylphenoxy-.kappa.O)phenyl]-9-anthracenaminato-.kappa.N]- (9CI) (CA INDEX NAME)

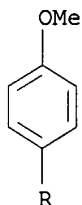


RN 365424-74-4 HCAPLUS
 CN Hafnium, [N-[2-(4-methoxyphenoxy-.kappa.O)-5-(trifluoromethyl)phenyl]-
 2,4,6-tris(1-methylethyl)benzenaminato-.kappa.N]tris(phenylmethyl)- (9CI)
 (CA INDEX NAME)

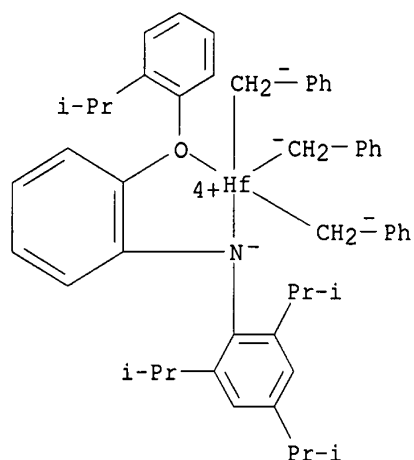
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PAGE 2-A

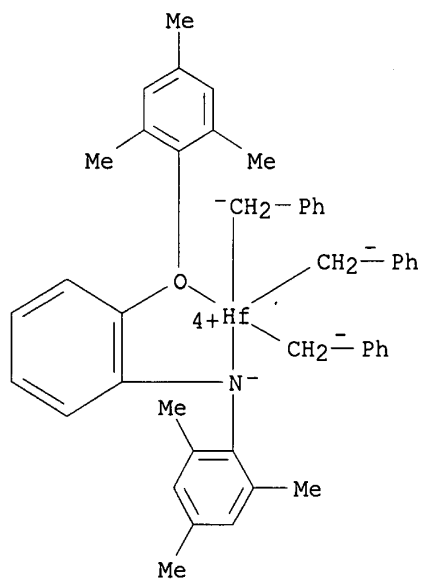


RN 365424-82-4 HCAPLUS
 CN Hafnium, tris(phenylmethyl)[2,4,6-tris(1-methylethyl)-N-[2-[2-(1-
 methylethyl)phenoxy-.kappa.O]phenyl]benzenaminato-.kappa.N]- (9CI) (CA
 INDEX NAME)



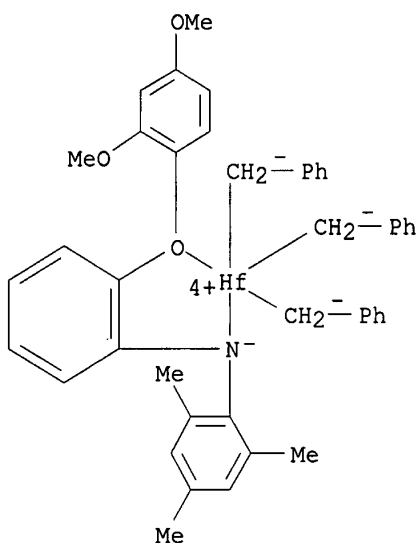
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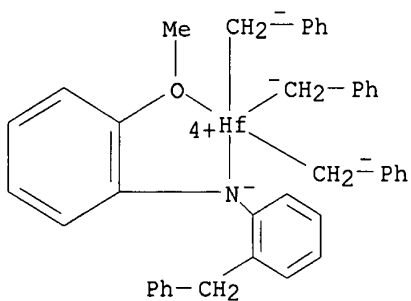
RN 365424-86-8 HCAPLUS

CN Hafnium, [N-[2-(2,4-dimethoxyphenoxy-.kappa.O)phenyl]-2,4,6-trimethylbenzenaminato-.kappa.N]tris(phenylmethyl)- (9CI) (CA INDEX NAME)



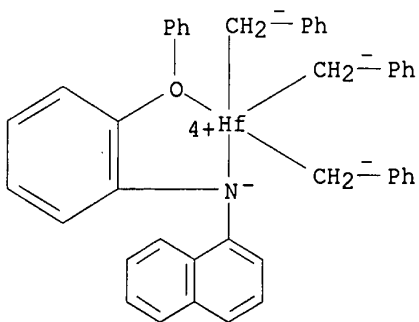
RN 365424-90-4 HCAPLUS

CN Hafnium, [2-(methoxy-.kappa.O)-N-[2-(phenylmethyl)phenyl]benzenaminato-.kappa.N]tris(phenylmethyl)- (9CI) (CA INDEX NAME)



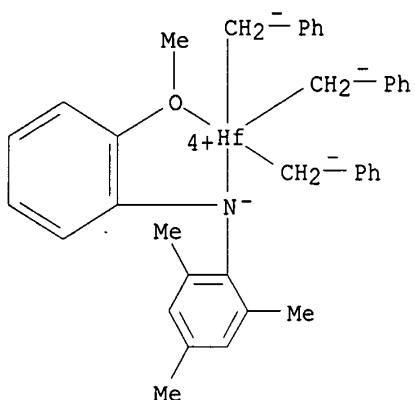
RN 365424-91-5 HCAPLUS

CN Hafnium, [N-[2-(phenoxy-.kappa.O)phenyl]-1-naphthalenaminato-.kappa.N]tris(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 365424-92-6 HCAPLUS

CN Hafnium, [N-[2-(methoxy-.kappa.O)phenyl]-2,4,6-trimethylbenzenaminato-.kappa.N]tris(phenylmethyl)- (9CI) (CA INDEX NAME)



IT **365424-93-7P**

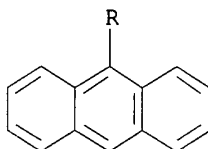
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
USES (Uses)

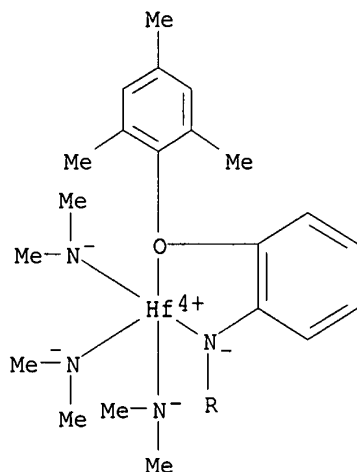
(ether-amine ligand/metal complex polymn. catalyst for olefin polymn.)

RN 365424-93-7 HCAPLUS

CN Hafnium, tris(N-methylmethanaminato)[N-[2-(2,4,6-trimethylphenoxy-.kappa.O)phenyl]-9-anthracenaminato-.kappa.N]- (9CI) (CA INDEX NAME)

PAGE 1-A





- L12 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2003 ACS
 AN 2000:815680 HCAPLUS
 DN 134:56762
 TI A study of ortho- and para-siloxyanilines for the synthesis of mono-, bi-, and tetra-nuclear early transition metal-imido complexes
 AU Benito, J. M.; Arevalo, Silvia; de Jesus, E.; de la Mata, F. J.; Flores, J. C.; Gomez, R.
 CS Dep. Quim. Inorg., Univ. de Alcala, Madrid, ES-28871, Spain
 SO Journal of Organometallic Chemistry (2000), 610(1-2), 42-48
 CODEN: JORCAI; ISSN: 0022-328X
 PB Elsevier Science S.A.
 DT Journal
 LA English
 CC 29-10 (Organometallic and Organometalloidal Compounds)
 OS CASREACT 134:56762
 AB The siloxyanilines o-Me₃SiOC₆H₄NH₂ (1) and p-RMe₂SiOC₆H₄NH₂ (R = H (2); R = Me(3)), and their N-silylated derivs. p-Me₃SiOC₆H₄NHSiMe₃ (4) and p-Me₃SiOC₆H₄N(SiMe₃)₂ (5) have been prepd. from ortho- or para-aminophenol and used in the synthesis of imido complexes. Thus, binuclear [Ti(.eta.⁵-C₅H₅)Cl]{.mu.⁻NC₆H₄(p-OSiMe₃)}₂ (6) and mononuclear [TiCl₂{NC₆H₄(p-OSiMe₃)}(py)₃] (7) imido complexes have been obtained from reaction of 3 and [Ti(.eta.⁵-C₅H₅)Cl₃] or [TiCl₂(NtBu)(py)₃], resp. In contrast, reaction of 1 with TiCl₄ and tbupy afforded titanocycle [TiCl₂{OC₆H₄(o-NH)-N,O}(tbupy)₂] (8). Compd. 5 was also used to prep. niobium imide complex [NbCl₃{NC₆H₄(p-OSiMe₃)}(MeCN)₂] (9), by reaction with NbCl₅ in CH₃CN. These findings have been applied to the synthesis of polynuclear systems. Thus, chlorocarbosilane Si[CH₂CH₂CH₂Si(Me)₂Cl]₄ (CS-Cl) has been functionalized with ortho- and para-aminophenoxy groups to give Si{CH₂CH₂CH₂Si(Me)₂OC₆H₄(o-NH₂)₄ 10 and Si{CH₂CH₂CH₂Si(Me)₂OC₆H₄(p-NH₂)₄ 11, resp. The use of 11 allowed formation of a tetranuclear compd., Si{CH₂CH₂CH₂Si(Me)₂OC₆H₄[p-NTiCl₂(py)₂]}₄. Attempts to synthesize terminal imido titanium complexes from 10 and TiCl₄ in the presence of tbupy and Et₃N, gave complex 8 and carbosilane CS-Cl.
 ST siloxyaniline prepn reaction titanium niobium chloro complex; imido titanium niobium chloro mononuclear polynuclear complex prepn

- IT Imines
RL: SPN (Synthetic preparation); PREP (Preparation)
(niobium and titanium complexes; study of ortho- and para-siloxyanilines for synthesis of mono- and polynuclear)
- IT Amines, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(siloxyanilines; study of ortho- and para-siloxyanilines for synthesis of mono- and polynuclear titanium and niobium imido complexes)
- IT 13569-59-0, Niobium(III) chloride
RL: RGT (Reagent); RACT (Reactant or reagent)
(prepn. of)
- IT 313706-04-6P 313706-05-7P **313706-06-8P** 313706-07-9P
313706-10-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
- IT 75-77-4, Chlorotrimethylsilane, reactions 95-55-6, 2-Hydroxyaniline
123-30-8, 4-Hydroxyaniline 1066-35-9, Chlorodimethylsilane 1270-98-0,
Trichloro(.eta.5-cyclopentadienyl)titanium 3978-81-2, tert-Butylpyridine
161638-89-7, Tetrakis(3-(chlorodimethylsilyl)propyl)silane 172481-11-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(study of ortho- and para-siloxyanilines for synthesis of mono- and polynuclear titanium and niobium imido complexes)
- IT 31935-76-9P, N,N-Bis(trimethylsilyl)-4-((trimethylsilyl)oxy)aniline
36309-42-9P, 4-((Trimethylsilyl)oxy)aniline 36309-44-1P,
2-((Trimethylsilyl)oxy)aniline 52726-86-0P, N-Trimethylsilyl-4-
((trimethylsilyl)oxy)aniline 60613-13-0P 313706-08-0P 313706-09-1P
313706-11-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(study of ortho- and para-siloxyanilines for synthesis of mono- and polynuclear titanium and niobium imido complexes)
- IT 313706-03-5P, 4-((Dimethylsilyl)oxy)aniline **313706-12-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(study of ortho- and para-siloxyanilines for synthesis of mono- and polynuclear titanium and niobium imido complexes)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Alonso, B; J Chem Soc Chem Commun 1994, P2575 HCAPLUS
- (2) Arevalo, S; J Organomet Chem 2000, V602, P208 HCAPLUS
- (3) Blake, A; J Chem Soc Dalton Trans 1997, P1549 HCAPLUS
- (4) Bruning, K; J Organomet Chem 1999, V575, P153 HCAPLUS
- (5) Cardoso, A; J Chem Soc Dalton Trans 1980, P1156 HCAPLUS
- (6) Collier, P; J Chem Soc Dalton Trans 1995, P3743 HCAPLUS
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- (13) Jolly, M; J Chem Soc Dalton Trans 1992, P1331 HCAPLUS
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- (15) Mountford, P; Chem Commun 1997, P2127 HCAPLUS
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- (18) Perrin, D; Purification of Laboratory Chemicals, third ed 1988
- (19) Rheiner, P; Chem Eur J 1999, V5, P3221 HCAPLUS
- (20) Sellner, H; Angew Chem Int Ed Engl 1999, V38, P1918 HCAPLUS

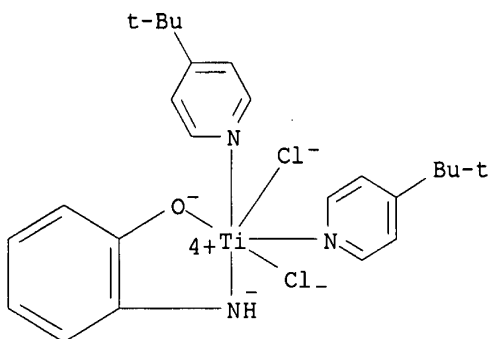
- (21) Seyferth, D; PCT Int Appl WO 97/32908 1997
- (22) Seyferth, D; PCT Int Appl WO 97/32918 1997
- (23) Stoddart, F; Polyhedron 1999, V18, P3575 HCAPLUS
- (24) Vroegop, C; J Chem Soc Chem Commun 1983, P550 HCAPLUS
- (25) Wigley, D; Prog Inorg Chem 1994, V42, P239 HCAPLUS
- (26) Williams, D; J Chem Soc Dalton Trans 1992, P739 HCAPLUS

IT **313706-06-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 313706-06-8 HCAPLUS

CN Titanium, [2-(amino-.kappa.N)phenolato(2-)-.kappa.O]dichlorobis[4-(1,1-dimethylethyl)pyridine]-, (OC-6-42)- (9CI) (CA INDEX NAME)

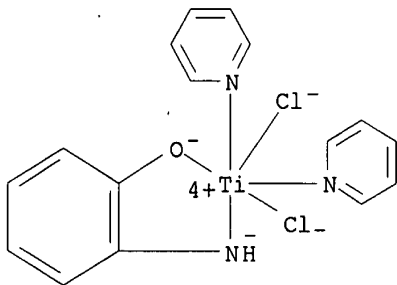


IT **313706-12-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(study of ortho- and para-siloxyanilines for synthesis of mono- and polynuclear titanium and niobium imido complexes)

RN 313706-12-6 HCAPLUS

CN Titanium, [2-(amino-.kappa.N)phenolato(2-)-.kappa.O]dichlorobis(pyridine)- (9CI) (CA INDEX NAME)



L12 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2003 ACS

AN 2000:523617 HCAPLUS

DN 133:231939

TI Terbium (hydroxo)phenylanthranilates

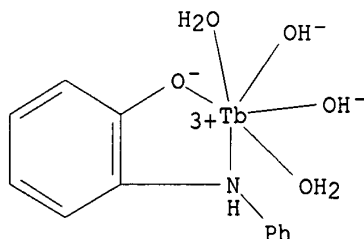
AU Kalinovskaya, I. V.; Karasev, V. E.; Neprokina, E. V.

CS Inst. Khim., DVO RAN, Vladivostok, Russia

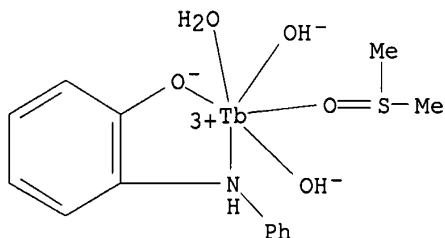
SO Zhurnal Neorganicheskoi Khimii (2000), 45(7), 1142-1145

CODEN: ZNOKAQ; ISSN: 0044-457X

PB MAIK Nauka/Interperiodica Publishing
 DT Journal
 LA Russian
 CC 78-7 (Inorganic Chemicals and Reactions)
 AB TbL(OH)₂.Q (HL = phenylanthranilic acid; Q = H₂O, DMSO, piperidine, Et₂NPh) was prepd. by the reaction of TbCl₃ with HL in presence of Q. TbL(OH)₂.Q were characterized by IR spectra, thermal anal. and luminescence spectroscopy. The thermal stability of the complexes was detd. L coordinates through the carboxylate O and N atoms.
 ST terbium phenylanthranilate hydroxo complex prepn IR; luminescence terbium phenylanthranilate hydroxo complex
 IT IR spectra
 Luminescence
 (of terbium hydroxide phenylanthranilate complexes)
 IT 292135-89-8P 292135-90-1P 292135-91-2P 292135-92-3P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and IR spectra)
 IT 91-40-7 91-66-7, Diethylaniline 110-89-4, Piperidine, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactant for prepn. of terbium hydroxide phenylanthranilate complexes)
 IT 292135-89-8P 292135-90-1P 292135-91-2P 292135-92-3P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and IR spectra)
 RN 292135-89-8 HCAPLUS
 CN Terbium, diaquadihydroxy[2-(phenylamino-.kappa.N)phenolato-.kappa.O]-(9CI) (CA INDEX NAME)

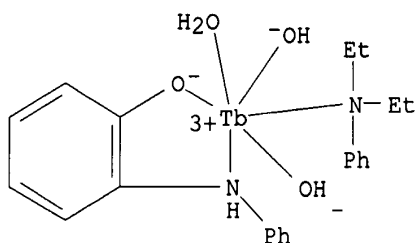


RN 292135-90-1 HCAPLUS
 CN Terbium, aquadihydroxy[2-(phenylamino-.kappa.N)phenolato-.kappa.O] [(sulfinyl-.kappa.O)bis[methane]]- (9CI) (CA INDEX NAME)



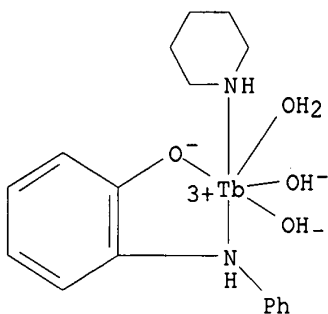
RN 292135-91-2 HCAPLUS

CN Terbium, aqua(N,N-diethylbenzenamine)dihydroxy[2-(phenylamino-.kappa.N)phenolato-.kappa.O]- (9CI) (CA INDEX NAME)



RN 292135-92-3 HCAPLUS

CN Terbium, aquadihydroxy[2-(phenylamino-.kappa.N)phenolato-.kappa.O](piperidine)- (9CI) (CA INDEX NAME)



L12 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:468345 HCAPLUS

DN 131:102661

TI Transition metal compounds useful as olefin polymerization catalysts and polymerization method therewith

IN Matsui, Shigekazu; Tsuru, Kazutaka; Nitahara, Masatoshi; Mitani, Makoto; Fujita, Terunori

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 44 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C07F007-28

ICS C07F007-00; C07F017-00; C08F004-642; C08F010-00

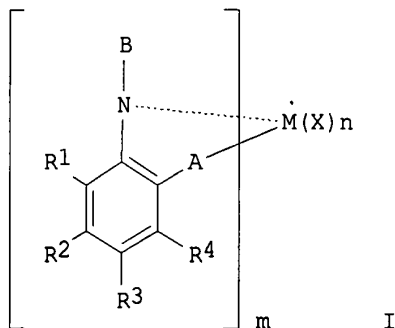
CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 67

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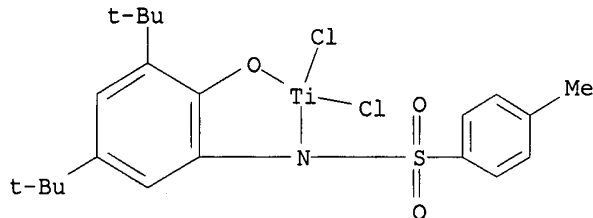
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PI	JP 11199592	A2	19990727	JP 1998-200115	19980715
PRAI	JP 1997-193516		19970718		
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	JP 1997-308398		19971111		
OS	MARPAT 131:102661				

GI

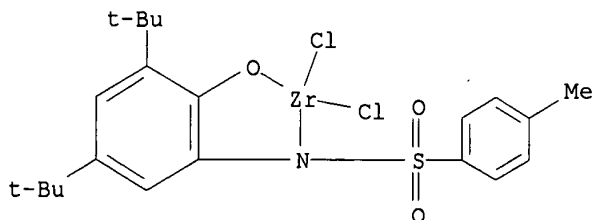


- AB Olefin polymn. catalysts comprise (A) transition metal compds. (I) and (B) org. metal compds., organoaluminum oxy compds. and/or compds. capable to form ion pairs by reaction with I, wherein M = group 3-11 transition metal; m = 1-6; A = O, S, Se, OR5, NR5, NR5R6, :CR7R8; B = R9, R10, :CR11R12; R1-12 = H, halogen, hydrocarbyl, heterocyclic compd. residue, group contg. O, N, B, S, P, Si, Ge, or Sn; n = no. satisfying valence of M; X = H, halogen, hydrocarbyl, group contg. O, S, N, B, Al, P, halogen, Si, Ge, or Sn, or heterocyclic compd. residue. Thus, ethylene was polymd. in the presence of Me aluminoxane and I prepd. from .alpha.-naphthylaldehyde, o-aminophenol, and titanium chloride to give a polyethylene with polymn. activity 12 g/mmol-Ti-h.
- ST transition metal compd olefin polymn catalyst; ethylene polymn methyl aluminoxane cocatalyst; polyethylene prepn coordination polymn catalyst; naphthylaldehyde aminophenol titanium chloride catalyst prepn
- IT Aluminoxanes
 RL: CAT (Catalyst use); USES (Uses)
 (Me, cocatalysts; prepn. of polyolefins using transition metal polym. catalysts)
- IT Polymerization catalysts
 (coordination; prepn. of transition metal olefin polym. catalysts)
- IT Polyolefins
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. of polyolefins using transition metal polym. catalysts)
- IT Transition metal compounds
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (prepn. of transition metal olefin polym. catalysts)
- IT 100-99-2, uses 136040-19-2, Triphenylcarbenium tetrakis(pentafluorophenyl)borate
 RL: CAT (Catalyst use); USES (Uses)
 (cocatalyst; prepn. of polyolefins using transition metal polym. catalysts)
- IT 1643-39-6P, 2-Amino-4,6-di-tert-butylphenol 20039-94-5P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (in ligand prepn.; prepn. of transition metal olefin polym. catalysts)
- IT 66-77-3, .alpha.-Naphthylaldehyde 75-77-4, reactions 95-55-6, o-Aminophenol 96-76-4, 2,4-Di-tert-butylphenol 98-59-9, p-Toluenesulfonyl chloride 100-52-7, Benzaldehyde, reactions 578-66-5, 8-Aminoquinoline 5036-87-3, 2-Methyl-7-aminobenzothiazole 5779-94-2,

2,5-Dimethylbenzaldehyde
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (in ligand prepn.; prepn. of transition metal olefin polym. catalysts)
 IT 3159-42-0P 5932-25-2P 231283-96-8P 231283-97-9P 231284-00-7P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (ligand; prepn. of transition metal olefin polym. catalysts)
 IT 9002-88-4P, Polyethylene
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. of polyolefins using transition metal polym. catalysts)
 IT **231283-98-0P 231283-99-1P** 231298-29-6P 231298-30-9P
 231298-31-0P 231298-32-1P 231298-33-2P 231298-34-3P
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)
 (prepn. of transition metal olefin polym. catalysts)
 IT 7550-45-0, Titanium tetrachloride, reactions 7632-51-1, Vanadium
 tetrachloride 7646-79-9, Cobalt dichloride, reactions 10026-11-6,
 Zirconium tetrachloride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of transition metal olefin polym. catalysts)
 IT **231283-98-0P 231283-99-1P**
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)
 (prepn. of transition metal olefin polym. catalysts)
 RN 231283-98-0 HCAPLUS
 CN Titanium, [N-[3,5-bis(1,1-dimethylethyl)-2-(hydroxy-.kappa.O)phenyl]-4-
 methylbenzenesulfonamidato(2-)-.kappa.N]dichloro-, (T-4)- (9CI) (CA INDEX
 NAME)



RN 231283-99-1 HCAPLUS
 CN Zirconium, [N-[3,5-bis(1,1-dimethylethyl)-2-(hydroxy-.kappa.O)phenyl]-4-
 methylbenzenesulfonamidato(2-)-.kappa.N]dichloro-, (T-4)- (9CI) (CA INDEX
 NAME)



AN 1998:494902 HCAPLUS
 DN 129:210868
 TI Crystal structure of an imine-TiCl₄ complex formed in catalytic
 aziridination reactions. Scope and mechanistic considerations
 AU Rasmussen, Kaare G.; Hazell, Rita G.; Jorgensen, Karl Anker
 CS Center for Metal Catalyzed Reactions, Department of Chemistry, Aarhus
 University, Aarhus, DK-8000, Den.
 SO Acta Chemica Scandinavica (1998), 52(8), 1056-1059
 CODEN: ACHSE7; ISSN: 0904-213X
 PB Munksgaard International Publishers Ltd.
 DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)
 Section cross-reference(s): 67, 75
 AB A dimeric imine-Ti(IV) complex formed in the TiCl₄-catalyzed aziridination
 of imines was isolated and characterized by x-ray diffraction. The
 structure is discussed and a mechanistic rationale is presented based on
 the enantiomeric excess obtained in catalytic aziridination of imines
 using alkyl diazoacetates as the carbene fragment donor in the presence of
 chiral TiX₂-TADDOLate complexes.
 ST crystal structure titanium benzylideneanisisidine chloro complex; titanium
 benzylideneanisisidine chloro complex prepn structure; aziridination
 catalytic reaction tin benzylideneanisisidine intermediate; TADDOLate
 titanium complex aziridination catalyst
 IT Cycloaddition reaction
 (aziridination; titanium N-benzylidene-o-anisidine intermediate in
 catalytic aziridination reactions)
 IT Crystal structure
 Molecular structure
 (of titanium N-benzylidene-o-anisidine chloro complex)
 IT Cycloaddition reaction catalysts
 (titanium N-benzylidene-o-anisidine chloro TADDOLate complexes for
 aziridination of Et diazoacetate)
 IT 623-73-4, Ethyl diazoacetate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (aziridination of catalyzed by titanium N-benzylidene-o-anisidine
 chloro TADDOLate complexes)
 IT 7440-32-6D, Titanium, TADDOLate complexes, uses 93379-48-7D, titanium
 complex 109306-21-0D, titanium complex 137365-09-4D, titanium complex
 158953-00-5D, titanium complex
 RL: CAT (Catalyst use); USES (Uses)
 (catalyst for aziridination of Et diazoacetate)
 IT 5877-56-5, N-Benzylidene-o-anisidine
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (for prepn. of titanium N-benzylidene-o-anisidine chloro complex as
 intermediate in catalytic aziridination reactions)
 IT **212247-06-8P**
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP
 (Preparation); RACT (Reactant or reagent)
 (prepn. and crystal structure of intermediate in catalyzed
 aziridination reaction and reaction with Et diazoacetate)
 IT 212247-07-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. by titanium N-benzylidene-o-anisidine chloro TADDOLate complex
 catalyzed aziridination of Et diazoacetate)
 RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
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IT 212247-06-8P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and crystal structure of intermediate in catalyzed aziridination reaction and reaction with Et diazoacetate)

RN 212247-06-8 HCAPLUS

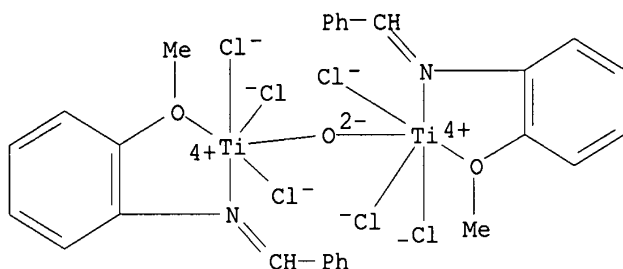
CN Titanium, hexachlorobis[[N(E)]-2-(methoxy-.kappa.O)-N-(phenylmethylene)benzenamine-.kappa.N]-.mu.-oxodi-, stereoisomer, compd. with trichloromethane (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 212247-05-7

CMF C28 H26 Cl6 N2 O3 Ti2

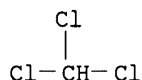
CCI CCS



CM 2

CRN 67-66-3

CMF C H Cl3



L12 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2003 ACS
 AN 1998:483497 HCAPLUS
 DN 129:210841
 TI Reactions of $\text{Ti}(\text{O}-i\text{-Pr})\text{Cl}_3$ with 2-aminophenol and the crystal structure of the zwitterionic complex $[\text{Ti}(\text{O}-i\text{-Pr})\text{Cl}_3(\text{THF})(-\text{OC}_6\text{H}_4\text{NH}_3^+)] \cdot \text{cndot.THF}$
 AU Ho, Yuh-Chou; Hwang, Tyng-Yuh; Gau, Han-Mou
 CS Department of Chemistry, National Chung-Hsing University, Taichung, 402, Taiwan
 SO Inorganica Chimica Acta (1998), 278(2), 232-236
 CODEN: ICHAA3; ISSN: 0020-1693
 PB Elsevier Science S.A:
 DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)
 Section cross-reference(s): 75
 AB $\text{Ti}(\text{O}-i\text{-Pr})\text{Cl}_3$ reacts with 1 molar equivalent of 2-aminophenol ($\text{HOC}_6\text{H}_4\text{NH}_2$) in CH_2Cl_2 to afford the likely zwitterionic complex $[\text{Ti}(\text{O}-i\text{-Pr})\text{Cl}_3(\text{OC}_6\text{H}_4\text{NH}_3)]_2$ (1). However, when the reaction is carried out in THF, another zwitterionic complex $[\text{Ti}(\text{O}-i\text{-Pr})\text{Cl}_3(\text{THF})(\text{OC}_6\text{H}_4\text{NH}_3)] \cdot \text{cndot.}(\text{THF})$ (2) was obtained. With the addn. of $\text{Ti}(\text{O}-i\text{-Pr})\text{Cl}_3$ to a mixt. of 2-aminophenol and NEt_3 in CH_2Cl_2 , the reaction gives the likely monomeric complex $[\text{Ti}(\text{O}-i\text{-Pr})\text{Cl}_3(\text{OC}_6\text{H}_4\text{NH}_2)] \cdot (\text{HNEt}_3)^+$ (3). The role of the amino group and the effect of the addn. of NEt_3 and the coordinating THF solvent are discussed. 2 Was characterized by x-ray crystallog. (monoclinic, space group $\text{P}2_1/\text{c}$, $R = 0.042$). The mol. structure of 2 reveals a species contg. the zwitterionic 2-ammonium phenoxide ligand. Two THF mols. are found in the solid state structure in which one THF coordinates to the titanium metal center and the 2nd THF is held tightly via the hydrogen bonding from one ammonium hydrogen. The mol. structure of 2 suggests that the relative bonding abilities of the ligands are in the order of $-\text{O}-i\text{-Pr} > -\text{OAr} > -\text{Cl} > \text{THF}$.
 ST crystal structure titanium propanolato ammoniophenolato THF; structure

titanium propanolato ammoniophenolato THF chloro; titanium propanolato ammoniophenolate zwitterion prepn structure; aminophenolate titanium propanolate chloro complex prepn

IT Crystal structure
Hydrogen bond
Molecular structure
(of titanium propanolato chloro THF ammoniophenolato zwitterionic complex)

IT 95-55-6, 2-Aminophenol 3981-83-7, Trichloro(isopropanolato)titanium
RL: RCT (Reactant); RACT (Reactant or reagent)
(for prepn. of titanium propanolato chloro aminophenolato and ammoniophenolato zwitterionic complexes)

IT 212068-25-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and crystal structure)

IT 212068-23-0P **212068-27-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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IT 212068-27-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 212068-27-4 HCAPLUS

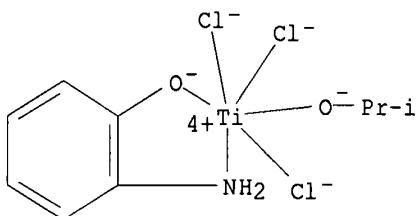
CN Titanate(1-), [2-(amino-.kappa.N)phenolato-.kappa.O]trichloro(2-propanolato)-, (OC-6-21)-, hydrogen, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 212068-26-3

CMF C9 H13 Cl3 N O2 Ti . H

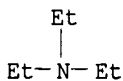
CCI CCS



CM 2

CRN 121-44-8

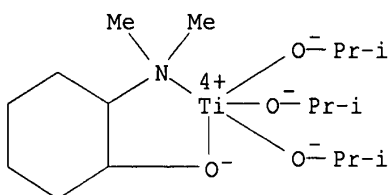
CMF C6 H15 N



L12 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:546020 HCAPLUS
DN 123:131154

TI An NMR study of mixed, tartrate-containing TiIV complexes
 AU Potvin, Pierre G.; Fieldhouse, Benjamin G.
 CS Dep. Chem., York Univ., North York, ON, M3J 1P3, Can.
 SO Canadian Journal of Chemistry (1995), 73(3), 401-13
 CODEN: CJCHAG; ISSN: 0008-4042
 PB National Research Council of Canada
 DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)
 AB The reactions of amines and amino alcs. with diisopropyl or di-Et R,R- or S,S-tartrate and Ti(OiPr)₄ were examd. by ¹H and ¹³C NMR to obtain and characterize nonfluxional complexes with the tartrate units in novel binding modes. The mildly acidic 8-hydroxyquinoline and N-phenyl-N-benzoylhydroxylamine selectively formed the products of a double OiPr substitution, Ti₂(tartrate)₂(ligand)₂(OiPr)₂, and the products of double tartrate substitution, Ti(ligand)₂(OiPr)₂, while 2,4-pentanedione formed only the latter. Basic amino alkanols formed diastereomerically pure Ti₂(tartrate)₂(aminoalkoxide)(OiPr)₃ species. N,N-dimethyl-2-aminoethanol (Hdmae) also and uniquely formed monomeric Ti(tartrate)₂(Hdmae)₂ species that could be described as doubly zwitterionic. Secondary or tertiary amines formed triply C2-sym. Ti₃(tartrate)₄(amine)₂(OiPr)₄ assemblies. Some minor components were believed to be .mu.-OiPr species. All mixed complexes except Ti(tartrate)₂(Hdmae)₂ contained chelating and bridging tartrate units, without coordination by ester carbonyls. A nonchelating, nonbridging tartrate unit was also present in the amino alc. cases. Primary amines, arom. amines, and hydrazines all failed to provide identifiable complexes. As well, N,N-dibenzylhydroxylamine failed to generate in soln. the complex that had previously been characterized by x-ray crystallog. Amidst the rich chem. of TiIV-tartrate systems, the evident selectivities in product formation were ascribed to macro-ring closures that are specifically directed by the electronic nature of the addend. Transient OiPr-bridged intermediates were also implicated.
 ST titanium tartrate ester mixed ligand complex; amine titanium tartrate ester complex; amino alc titanium tartrate ester complex
 IT Amines, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (titanium tartrate ester complexes)
 IT Alcohols, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (amino, titanium tartrate ester complexes)
 IT 87-91-2, Diethyl R,R-tartrate 103-74-2, 2-(2-Hydroxyethyl)pyridine 108-01-0 109-89-7, reactions 110-18-9, N,N,N',N'-Tetramethyl-1,2-diaminoethane 110-91-8, Morpholine, reactions 118-10-5, (+)-Cinchonine 123-54-6, Acetylacetone, reactions 148-24-3, 8-Hydroxyquinoline, reactions 299-42-3, (-)-(1R,2S)-Ephedrine 304-88-1, N-Benzoyl-N-phenylhydroxylamine 321-98-2, (+)-(1S,2R)-Ephedrine 621-07-8, N,N-Dibenzylhydroxylamine 2217-15-4, Diisopropyl R,R-tartrate 21651-78-5 53657-16-2, (.+.-)-N,N-Dimethyl-1-amino-2-propanol 62961-64-2, Diisopropyl S,S-tartrate 144182-65-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (for prepn. of titanium tartrate ester mixed-ligand complexes)
 IT 23072-32-4P 23329-69-3P 40881-31-0P 141879-37-0P 141902-60-5P
 141902-61-6P 141902-63-8P 141928-09-8P 144182-66-1P 144191-89-9P
 144191-90-2P 165824-60-2P 165824-61-3P 165824-62-4P 165824-63-5P
 165824-64-6P 165824-65-7P 165824-66-8P 165824-67-9P 165824-68-0P
 165824-69-1P 165824-70-4P **165824-71-5P** 165824-72-6P
 166374-99-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT **165824-71-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 165824-71-5 HCAPLUS
CN Titanium, [2-(dimethylamino)cyclohexanolato-N,O]tris(2-propanolato)- (9CI)
(CA INDEX NAME)



L12 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:531719 HCAPLUS
DN 123:24552
TI Synthesis and characterization of some new lanthanide(III) chelates with
1,4-bis(2'-hydroxyphenylazomethine)phenylene
AU Moustafa, M. M.
CS Fac. Sci., Benha Univ., Benha Kalubia, Egypt
SO Monatshefte fuer Chemie (1995), 126(3), 255-61
CODEN: MOCMB7; ISSN: 0026-9247
PB Springer
DT Journal
LA English
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 68
AB The chelates formed between 1,4-bis(2'-hydroxyphenylazomethine)phenylene,
1-(2-(HOC6H4N:CH)C6H4(CH:NC6H4OH-2)-4, with La, Ce, Pr, Nd, Sm, Gd, Dy, Er,
Yb, and Lu ions were studied in soln. using conductometric,
potentiometric, and spectrophotometric methods. The studies revealed the
formation of M2L and ML complexes. The solid chelates were characterized
by elemental and thermal anal., molar conductance, IR, 1H NMR (for La and
Lu chelates), and electronic spectra. The bonding takes place through the
coordination of N in the -CH=N- group and the O of the hydroxyl group by
proton displacement.
ST aminophenol phenylenedicarboxaldehyde Schiff lanthanide complex; formation
const lanthanide Schiff base complex; thermal decompn lanthanide Schiff
base complex
IT Ionization in liquids
(of bis(hydroxyphenylazomethine)phenylene)
IT Formation constant and Stability constant
Kinetics of thermal decomposition
Thermal decomposition
(of rare earth bis(hydroxyphenylazomethine)phenylene complexes)
IT Rare earth compounds
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP
(Preparation); RACT (Reactant or reagent)
(Schiff base complexes, prepn., thermal decompn. and formation consts.
of bis(hydroxyphenylazomethine)phenylene)
IT Schiff bases

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (rare earth metal complexes, prepn., thermal decompn. and formation consts. of bis(hydroxyphenylazomethine)phenylene)

IT 7440-45-1D, Cerium, 1,4-bis(2'-hydroxyphenylazomethine)phenylene complexes
 7440-52-0D, Erbium, 1,4-bis(2'-hydroxyphenylazomethine)phenylene complexes
 7440-64-4D, Ytterbium, 1,4-bis(2'-hydroxyphenylazomethine)phenylene complexes 13060-68-9D, cerium, erbium, and ytterbium complexes

RL: PRP (Properties)
 (formation consts. of)

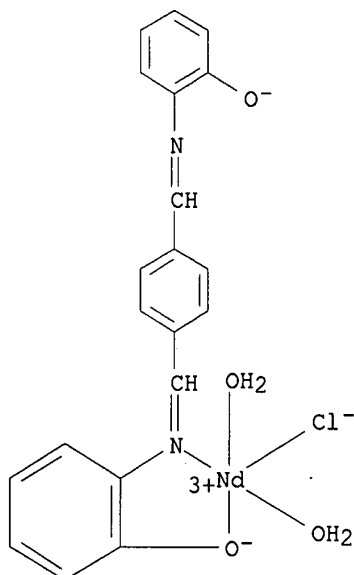
IT 13060-68-9
 RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
 (ionization consts. and use for prepn. of rare earth complexes)

IT 163732-08-9P 163732-09-0P 163732-10-3P
 163732-11-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and formation const. of)

IT 163731-98-4P 163731-99-5P 163732-00-1P
 163732-01-2P 163732-02-3P 163732-03-4P
 163732-04-5P 163732-05-6P 163732-06-7P
 163732-07-8P
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn., formation const. and thermal decompn. of)

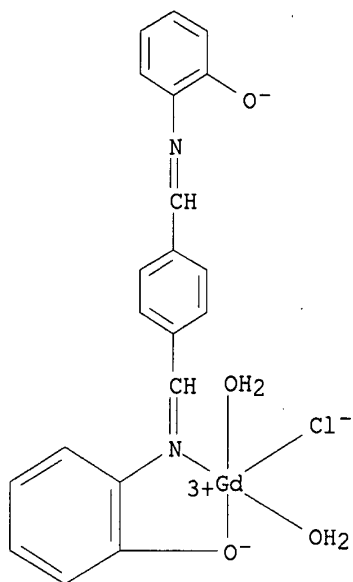
IT 163732-08-9P 163732-09-0P 163732-10-3P
 163732-11-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and formation const. of)

RN 163732-08-9 HCAPLUS
 CN Neodymium, diaquachloro[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O]- (9CI) (CA INDEX NAME)



RN 163732-09-0 HCAPLUS
 CN Gadolinium, diaquachloro[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[p

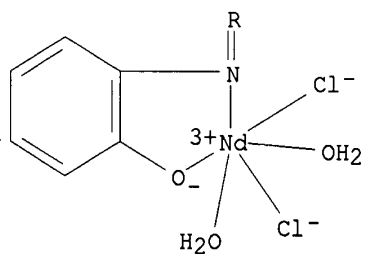
henolato]](2-)-N,O]- (9CI) (CA INDEX NAME)



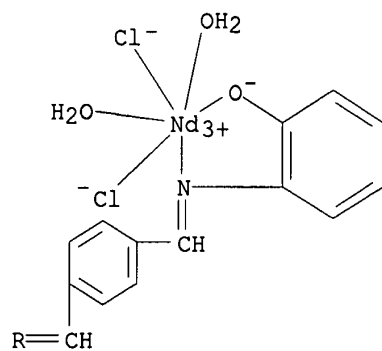
RN 163732-10-3 HCAPLUS

CN Neodymium, tetraaquatetrachloro[.mu.-[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O:N',O']]di-, dihydrate (9CI) (CA INDEX NAME)

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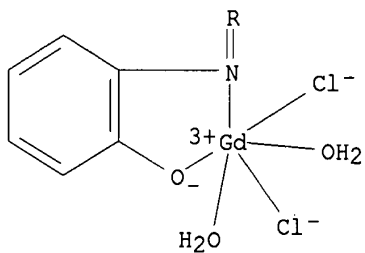
PAGE 2-A



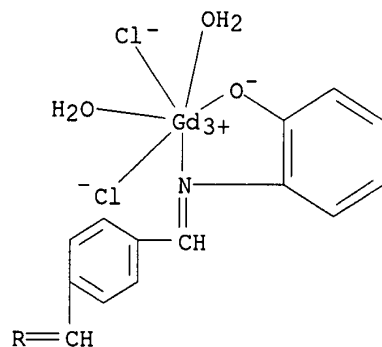
● 2 H₂O

RN 163732-11-4 HCAPLUS
 CN Gadolinium, tetraaquatetrachloro[.mu.-[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O:N',O']]di-, dihydrate (9CI) (CA INDEX NAME)

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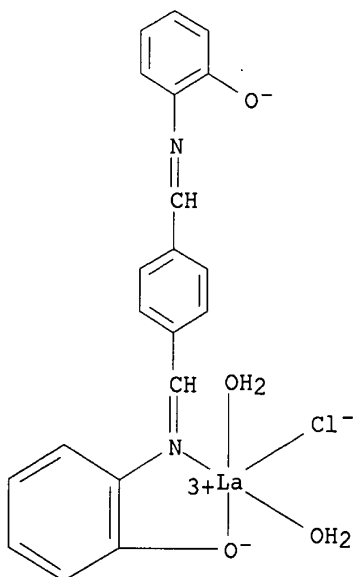
● 2 H₂O

IT 163731-98-4P 163731-99-5P 163732-00-1P
163732-01-2P 163732-02-3P 163732-03-4P
163732-04-5P 163732-05-6P 163732-06-7P
163732-07-8P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP
(Preparation); RACT (Reactant or reagent)
(prepn., formation const. and thermal decompn. of)

RN 163731-98-4 HCAPLUS

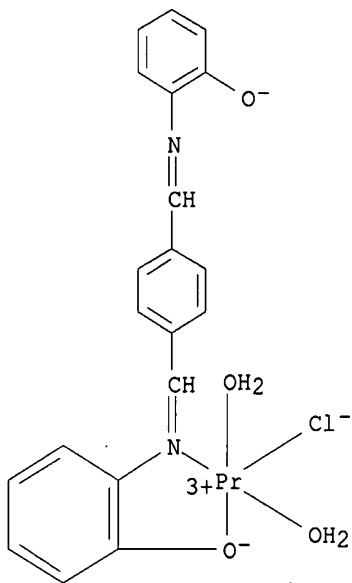
CN Lanthanum, diaquachloro[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis(ph
enolato]](2-)-N,O]- (9CI) (CA INDEX NAME)



RN 163731-99-5 HCAPLUS

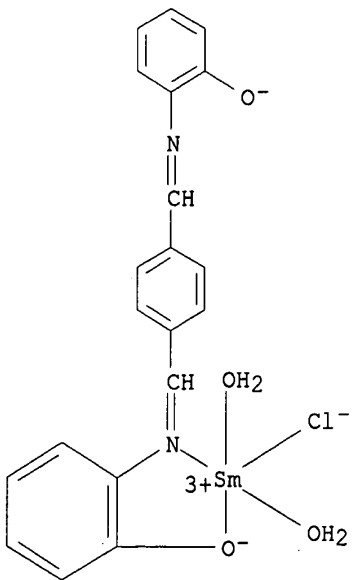
CN Praseodymium, diaquachloro[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis

[phenolato]](2-)-N,O]- (9CI) (CA INDEX NAME)



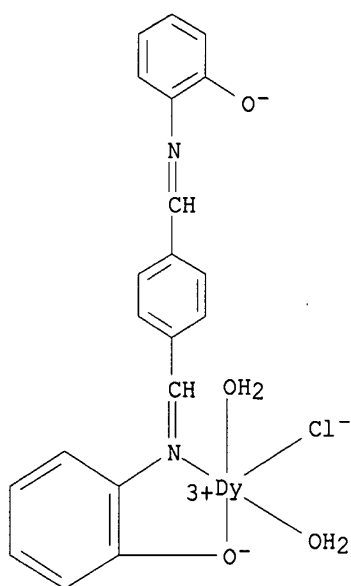
RN 163732-00-1 HCAPLUS

CN Samarium, diaquachloro[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O]- (9CI) (CA INDEX NAME)



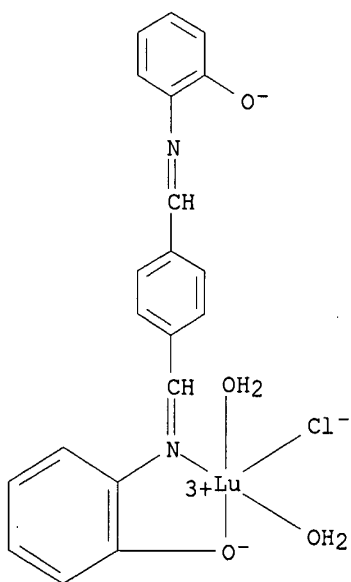
RN 163732-01-2 HCAPLUS

CN Dysprosium, diaquachloro[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O]- (9CI) (CA INDEX NAME)



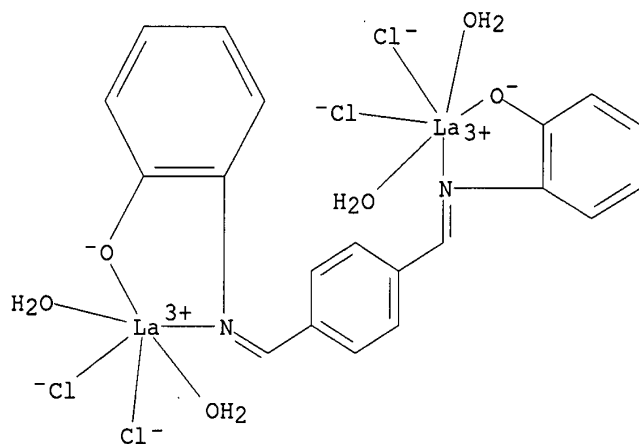
RN 163732-02-3 HCAPLUS

CN Lutetium, diaquachloro[[2,2'-(1,4-phenylenebis(methyldynenitrilo))bis[phenolato]](2-)-N,O]- (9Cl) (CA INDEX NAME)



RN 163732-03-4 HCAPLUS

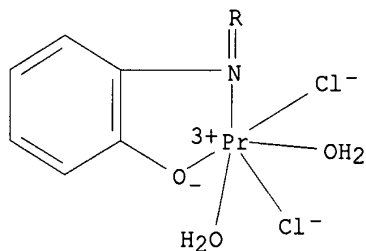
CN Lanthanum, tetraaquatetrachloro[.mu.-[[2,2'-(1,4-phenylenebis(methyldynenitrilo))bis[phenolato]](2-)-N,O:N',O']]di-, dihydrate (9Cl) (CA INDEX NAME)



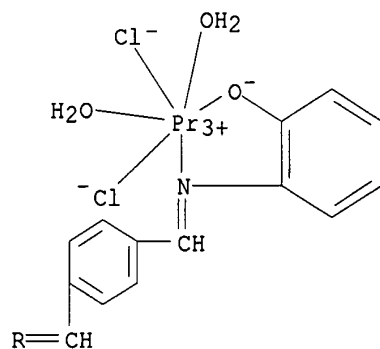
● 2 H₂O

RN 163732-04-5 HCAPLUS
 CN Praseodymium, tetraaquatetrachloro[.mu.-[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O:N',O']]di-, dihydrate (9CI) (CA INDEX NAME)

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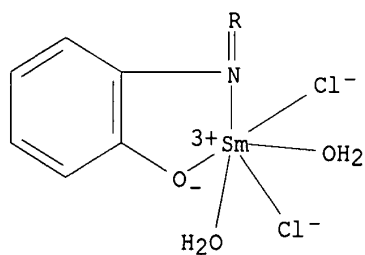
PAGE 2-A



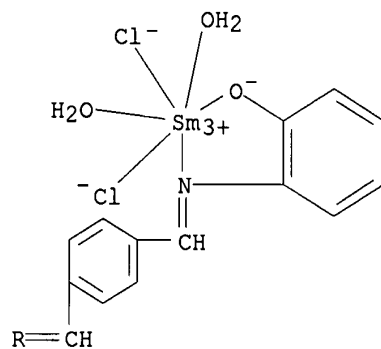
● 2 H₂O

RN 163732-05-6 HCAPLUS
 CN Samarium, tetraaquatetrachloro[.mu.-[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O:N',O']]di-, dihydrate (9CI) (CA INDEX NAME)

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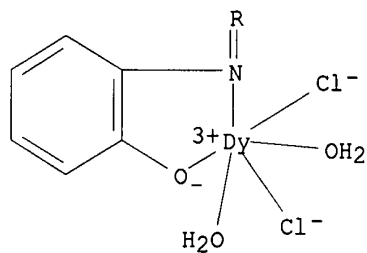
PAGE 2-A



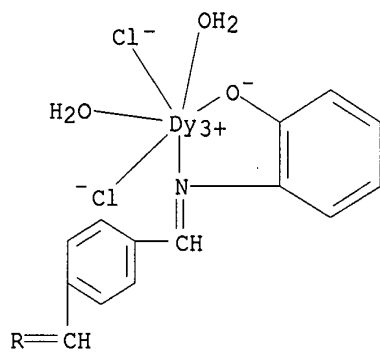
● 2 H₂O

RN 163732-06-7 HCAPLUS
 CN Dysprosium, tetraaquatetrachloro[.mu.-[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O:N',O']]di-, dihydrate (9CI) (CA INDEX NAME)

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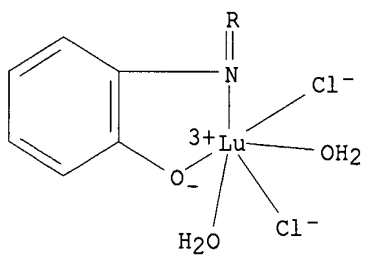
PAGE 2-A

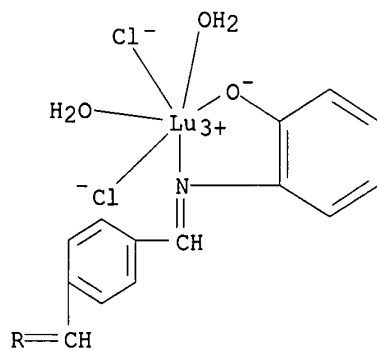


● 2 H₂O

RN 163732-07-8 HCAPLUS
 CN Lutetium, tetraaquatetrachloro[.mu.-[[2,2'-[1,4-phenylenebis(methyldynenitrilo)]bis[phenolato]](2-)-N,O:N',O']]di-, dihydrate (9CI) (CA INDEX NAME)

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● 2 H_2O

L12 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2003 ACS
 AN 1991:113977 HCAPLUS
 DN 114:113977
 TI New coordination polymers of 1,4-bis(2'-hydroxyphenylazomethine)phenylene
 AU Hassan, M. K.; Abd-Alla, M. A.; Hasan, R. M.
 CS Fac. Sci., Assiut Univ., Assiut, Egypt
 SO Journal of Macromolecular Science, Chemistry (1990), A27(12), 1503-14
 CODEN: JMCHBD; ISSN: 0022-233X
 DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)
 Section cross-reference(s): 25, 76
 AB $[\text{MClL} \cdot \text{H}_2\text{O}]_n$ ($\text{M} = \text{Ti}, \text{Cr}, \text{Fe}$), $[\text{M1L} \cdot 2\text{H}_2\text{O}]_n$ ($\text{M1} = \text{Mn}, \text{Ni}$), and $[\text{CuL}]_n$ ($\text{H}_2\text{L} = 1,4\text{-[2-HOC}_6\text{H}_4\text{N:CH]}_2\text{C}_6\text{H}_4$) were prepd. They were characterized by elemental anal., IR, and electronic spectra. The thermal behavior of these coordination polymers was studied by TGA in air .ltoreq.750.degree., and they are thermally stable at .ltoreq.200.degree.. Phys. properties such as the soly. and viscosity of the polymer complexes were detd. Elec. cond. measurements of the synthesized polychelated polymers showed that they are insulators except for the Ni(II) complex which shows a semiconducting character. Moessbauer data establish the 3+ oxidn. state for the Fe complex polymer.
 ST transition metal phenylenedimethyleneaminophenolato polymeric complex; aminophenolato phenylenedimethylene transition metal polymer; elec cond transition metal phenylenedimethyleneaminophenolato polymer
 IT Semiconductor materials
 (nickel bis(hydroxyphenylazomethine)phenylene polymer complex)
 IT Electric conductivity and conduction
 Infrared spectra
 (of transition metal bis(hydroxyphenylazomethine)phenylene polymer complexes)
 IT Electric insulators and Dielectrics
 (transition metal bis(hydroxyphenylazomethine)phenylene complexes)
 IT Transition metals, compounds
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (complexes, with bis(hydroxyphenylazomethine)phenylene, prepn. and

elec. cond. and IR spectrum and thermal decompn. of polymeric)

IT Polymers, compounds
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (coordination, transition metal bis(hydroxyphenylazomethine)phenylene
 complexes, prepn. and elec. cond. and IR spectra and thermal decompn.
 of)

IT 623-27-8, 1,4-Benzenedialdehyde
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation reaction of, with aminophenol)

IT 95-55-6, 2-Aminophenol
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation reaction of, with benzenedialdehyde)

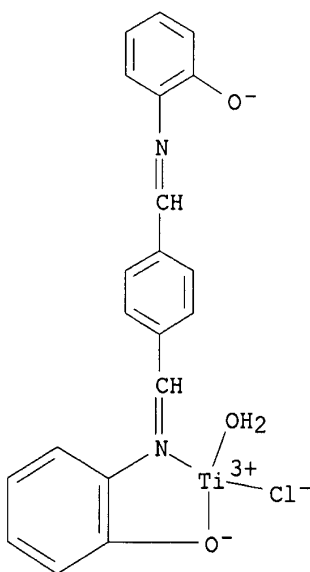
IT 13060-68-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and IR spectrum of)

IT 67290-47-5P 132322-53-3P **132355-75-0P** 132355-76-1P
 132355-77-2P 132355-78-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and elec. cond. and IR spectrum and thermal decompn. of
 polymeric)

IT **132355-75-0P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and elec. cond. and IR spectrum and thermal decompn. of
 polymeric)

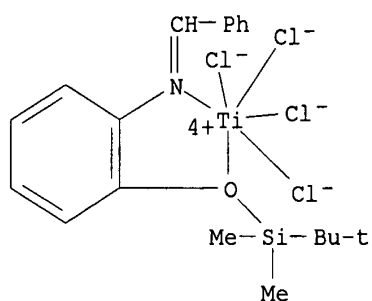
RN 132355-75-0 HCAPLUS

CN Titanium, aquachloro[[2,2'-[1,4-phenylenebis(methylidynenitrilo)]bis(pheno
 lato)](2-)-N,O]-, (T-4)- (9CI) (CA INDEX NAME)



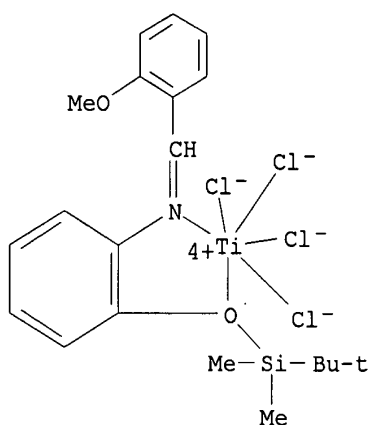
L12 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2003 ACS
 AN 1989:416663 HCAPLUS
 DN 111:16663
 TI Complexes of titanium tetrachloride with silylated Schiff bases
 AU De Blas, A.; Rodriguez, A.; Macias, A.; Bastida, R.; Sousa, A.; Ferro, O.;
 Diaz, A.

- CS Dep. Quim. Inorg., Univ. Santiago de Compostela, Santiago de Compostela, Spain
- SO Anales de Quimica, Serie B: Quimica Inorganica y Quimica Analitica (1988), 84(3), 287-92
CODEN: AQSAD3; ISSN: 0211-1349
- DT Journal
- LA Spanish
- CC 78-7 (Inorganic Chemicals and Reactions)
- AB $\text{TiCl}_4 \cdot \text{L}$ [$\text{L} = \text{RC}_6\text{H}_4\text{CH}:\text{NC}_6\text{H}_4(\text{OSiMe}_2(\text{Bu-tert})-\text{o})$ ($\text{R} = \text{H}$, 2- and 4-MeO, 2- and 4-Cl)], TiCl_2L_2 [$\text{HL}_1 = \text{R}_1\text{C}_6\text{H}_4\text{CH}:\text{NC}_6\text{H}_4\text{OH}-\text{o}$ ($\text{R} = 2\text{-MeO}$, 4-Me, 2- and 4-Cl), $\text{o-HOC}_6\text{H}_4\text{CH}:\text{NC}_6\text{H}_4\text{R}_2$ ($\text{R}_2 = 2\text{-}$ and 4-MeO, 2- and 4-Me, 2- and 4-Cl, 4-NO₂) and TiCl_2L_2 [$\text{H}_2\text{L}_2 = [\text{R}_3\text{-2-HOC}_6\text{H}_3\text{CH}:\text{N}]_2\text{Z}$ ($\text{R}_3 = \text{H}$, 5-Br, 3-EtO, $\text{Z} = (\text{CH}_2)_2$, $(\text{CH}_2)_3$, $\text{o-C}_6\text{H}_4$) or $[3,5\text{-Br}_2\text{C}_6\text{H}_2\text{CH}:\text{N}]_2\text{Z}$] were prepd. and characterized by IR and NMR spectra. L are neutral bidentate ligands whereas L₁ are monobasic bidentate and L₂ are dibasic tetradentate.
- ST titanium Schiff base chloro complex; benzylideneaminophenol titanium complex; salicylideneaniline titanium complex; salicylidenediaminoalkane titanium complex; salicylidenediaminobenzene titanium complex
- IT Nuclear magnetic resonance
(of silylated benzylideneaminophenols and salicylideneaniline and disalicylidenediaminoalkanes and disalicylidenediaminobenzene and their titanium tetrachloride reaction products)
- IT Infrared spectra
(of titanium complexes with Schiff bases)
- IT Schiff bases
RL: SPN (Synthetic preparation); PREP (Preparation)
(titanium complexes)
- IT 35025-67-3P 35025-68-4P 55806-34-3P 55806-35-4P 86362-71-2P
98220-11-2P 121116-90-3P 121116-91-4P 121116-92-5P 121116-93-6P
121116-94-7P 121116-95-8P 121116-96-9P **121131-59-7P**
121131-60-0P 121131-61-1P 121131-62-2P
121131-63-3P 121131-64-4P 121131-65-5P 121131-66-6P
121131-67-7P 121131-68-8P 121131-69-9P 121144-91-0P 121144-92-1P
121156-86-3P 121156-87-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and IR spectrum and NMR of)
- IT 68124-69-6P 82413-09-0P 121025-48-7P 121025-49-8P 121025-50-1P
121025-51-2P 121025-52-3P 121025-53-4P 121025-54-5P 121025-55-6P
121025-56-7P 121025-57-8P 121025-58-9P 121025-59-0P 121025-60-3P
121025-61-4P 121025-62-5P 121025-63-6P 121025-64-7P 121025-65-8P
121025-66-9P 121025-67-0P 121025-68-1P 121025-69-2P 121039-07-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and desilylation in reaction with titanium tetrachloride and NMR of)
- IT **121131-59-7P 121131-60-0P 121131-61-1P**
121131-62-2P 121131-63-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and IR spectrum and NMR of)
- RN 121131-59-7 HCAPLUS
- CN Titanium, tetrachloro[2-[[[1,1-dimethylethyl]dimethylsilyl]oxy]-N-(phenylmethylene)benzenamine-N,O]-, (OC-6-32)- (9CI) (CA INDEX NAME)



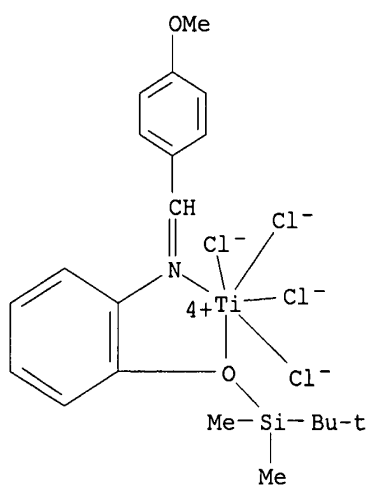
RN 121131-60-0 HCAPLUS

CN Titanium, tetrachloro[2-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-N-[(2-methoxyphenyl)methylene]benzenamine-N1,O2]-, (OC-6-32)- (9CI) (CA INDEX NAME)

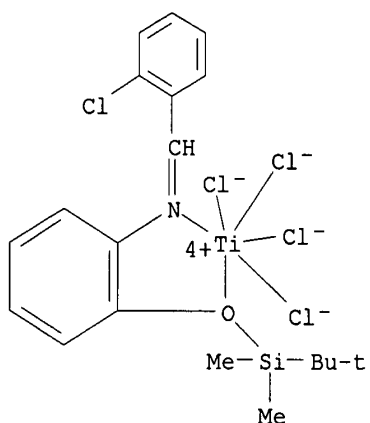


RN 121131-61-1 HCAPLUS

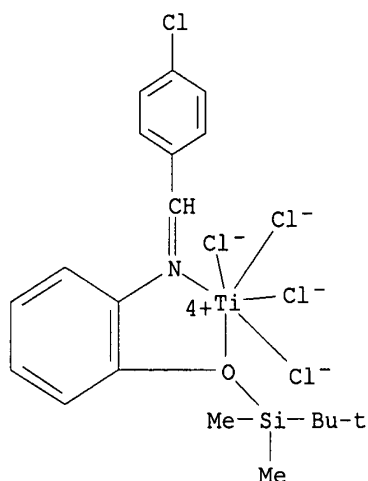
CN Titanium, tetrachloro[2-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-N-[(4-methoxyphenyl)methylene]benzenamine-N1,O2]-, (OC-6-32)- (9CI) (CA INDEX NAME)



RN 121131-62-2 HCAPLUS
 CN Titanium, tetrachloro[N-[(2-chlorophenyl)methylene]-2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]benzenamine-N,O]-, (OC-6-32)- (9CI) (CA INDEX NAME)



RN 121131-63-3 HCAPLUS
 CN Titanium, tetrachloro[N-[(4-chlorophenyl)methylene]-2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]benzenamine-N,O]-, (OC-6-32)- (9CI) (CA INDEX NAME)



L12 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2003 ACS

AN 1977:114601 HCAPLUS

DN 86:114601

TI Magnetic studies on the Schiff base complexes of lanthanum(III), praseodymium(III), and neodymium(III)

AU Agarwal, Shiv K.; Tandon, Jagdish P.

CS Dep. Chem., Univ. Rajasthan, Jaipur, India

SO Monatshefte fuer Chemie (1977), 108(1), 175-9

CODEN: MOCMB7; ISSN: 0026-9247

DT Journal

LA German

CC 77-1 (Magnetic Phenomena)

AB Specific magnetic susceptibilities (.chi.s) of several newly synthesized chelates of some of the lanthanons [La(III), Pr(III) and Nd(III)] are reported. These derivs. are of the general type, Ln (O-i-C3H7)3-n(C6H5CH:NRO)n [where, Ln = La(III), Pr(III) or Nd(III); n = 1 or 2 and R = CH2CH2, CH2CHCH3 or C6H4] and were prepd. by the reaction of the alkoxides of the lanthanons with Schiff bases such as benzylidene-2-hydroxyethylamine (C6H5CH:NCH2CH2OH), benzylidene-2-hydroxy-n-propylamine (C6H5CH:NCH2CHOHCH3) and benzylidene-o-aminophenol (C6H5CH:NC6H4OH) in different molar relations in dry benzene. The resulting cryst. derivs. are nonvolatile, light to deep yellow or blackish in color. These tend to polymerize on keeping as shown by their insol. nature and higher m.ps., the polymn. possibly occurring by the intermol. coordination through O atoms as reported earlier. With the Gouy method, the bis-isopropoxy mono-Schiff base and mono-isopropoxy bis-Schiff base complexes of La(III) were shown to be diamagnetic, with .chi.s values being in the range of -0.32 to -0.45 .times. 10-6 and -0.39 to -0.55 .times. 10-6 c.g.s. units at 305 K, resp. In the remaining derivs., Pr(O-i-C3H7)3-n(C6H5CH:NRO)n and Nd(O-i-C3H7)3-n(C6H5CH:NRO)n (where, n = 1 or 2 and R = CH2CH2, CH2CHCH3 or C6H4) the magnetic moment values range between 3.25 to 3.32 and 3.30 to 3.33 .mu.B resp., indicating their paramagnetic nature.

ST susceptibility magnetic rare earth chelate; lanthanum Schiff base magnetic susceptibility; neodymium Schiff base magnetic susceptibility; praseodymium Schiff base magnetic susceptibility

IT Magnetic moment

Magnetic susceptibility

(of rare earth Schiff base complexes)

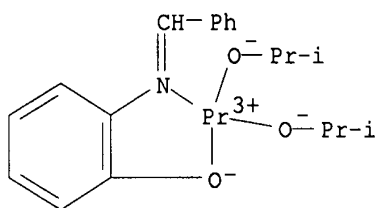
IT 56147-67-2 **56147-69-4** 56147-83-2 56147-85-4 56147-87-6
 56147-89-8 56147-91-2 56147-93-4 **56147-95-6** 56147-97-8
 56226-36-9 62288-33-9
 RL: PRP (Properties)
 (magnetic susceptibility and moment of)

IT 56147-65-0 **56147-73-0** 56147-75-2 56147-77-4 56147-79-6
 56147-81-0
 RL: PRP (Properties)
 (magnetic susceptibility of)

IT **56147-69-4 56147-95-6**
 RL: PRP (Properties)
 (magnetic susceptibility and moment of)

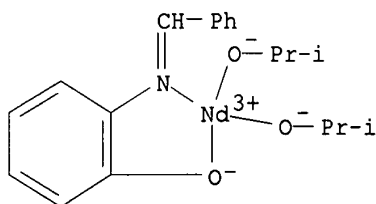
RN 56147-69-4 HCAPLUS

CN Praseodymium, [2-[(phenylmethylene)amino]phenolato-N,O]bis(2-propanolato)-(9CI) (CA INDEX NAME)



RN 56147-95-6 HCAPLUS

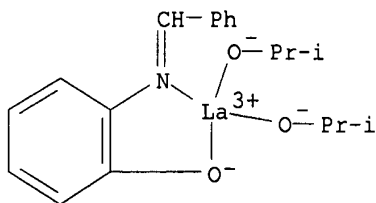
CN Neodymium, [2-[(phenylmethylene)amino]phenolato-N,O]bis(2-propanolato)-(9CI) (CA INDEX NAME)



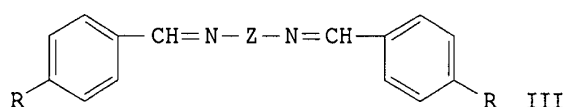
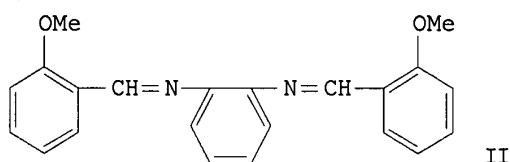
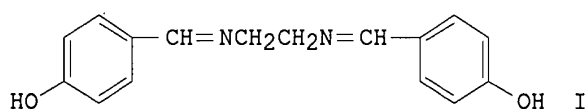
IT **56147-73-0**
 RL: PRP (Properties)
 (magnetic susceptibility of)

RN 56147-73-0 HCAPLUS

CN Lanthanum, [2-[(phenylmethylene)amino]phenolato-N,O]bis(2-propanolato)-(9CI) (CA INDEX NAME)



L12 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2003 ACS
 AN 1977:82992 HCAPLUS
 DN 86:82992
 TI Schiff base complexes of titanium(III)
 AU Rizvi, S. F. H.; Ahmad, Naseer
 CS Dep. Chem., Aligarh Muslim Univ., Aligarh, India
 SO Journal of the Indian Chemical Society (1976), 53(8), 854-5
 CODEN: JICSAH; ISSN: 0019-4522
 DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)
 GI



AB Ti(III) complexes with the Schiff bases I, II, and III (R = OH, Cl; Z = o-phenylene, 4,4'-biphenylene, 3,3'-dimethoxy-4,4'-biphenylene) of the types [TiCl2L]Cl, [TiCl2(H2O)2L]Cl, and [TiCl2L(THF)]Cl (L = the neutral bidentate Schiff base which coordinates only via the N atoms) were prepd. and characterized by chem. anal., magnetic moments, elec. cond., IR spectra, and thermogravimetry.

ST titanium 3 Schiff base complex

IT Schiff bases
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (titanium(3+) complexes)

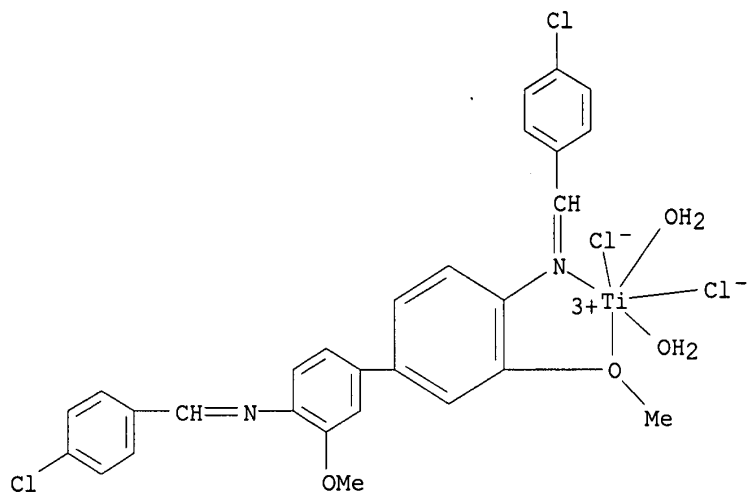
IT 61917-21-3P 61917-22-4P 61917-23-5P 61917-24-6P **61917-25-7P**
 61917-26-8P 61970-80-7P **61993-35-9P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

IT **61917-25-7P 61993-35-9P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 61917-25-7 HCAPLUS

CN Titanium(1+), diaqua[N,N'-bis[(4-chlorophenyl)methylene]-3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diamine-N4,O3]dichloro-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

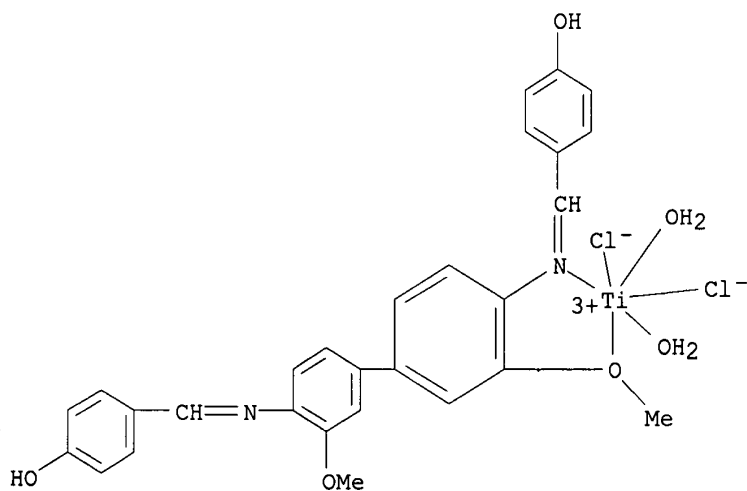


PAGE 2-A

● Cl⁻

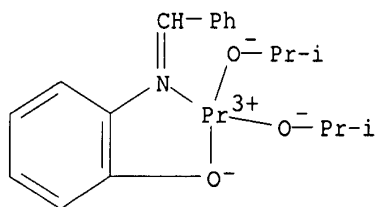
RN 61993-35-9 HCAPLUS
 CN Titanium(1+), diaquadichloro[4,4'-[(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis(nitrilomethylidyne)]bis[phenol]-N4,O4]-, chloride (9Cl) (CA INDEX NAME)

PAGE 1-A



Cl-

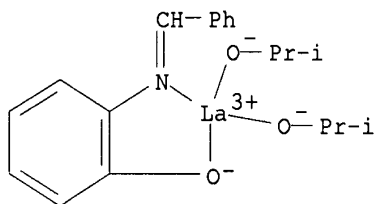
L12 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2003 ACS
AN 1975:470754 HCAPLUS
DN 83:70754
TI Schiff base derivatives of lanthanons. Synthesis of polymeric derivatives of lanthanum(III), praseodymium(III), and neodymium(III) from the Schiff bases derived from the condensation of benzaldehyde with hydroxyalkylamines or hydroxyarylamine
AU Agarwal, S. K.; Tandon, J. P.
CS Dep. Chem., Univ. Rajasthan, Jaipur, India
SO Acta Chimica Academiae Scientiarum Hungaricae (1975), 85(1), 71-8
CODEN: ACASA2; ISSN: 0001-5407
DT Journal
LA English
CC 78-7 (Inorganic Chemicals and Reactions)
AB Ln(OPr-iso)₃-n(PhCH:NR)_n, where Ln = La, Pr, Nd; n = 1 or 2; R = -CH₂CH₂O, -CH₂CH(Me)O, and C₆H₄O, were prep'd. by the reaction of Ln(OPr-iso)₃ with PhCH:NCH₂CH₂OH, PhCH:NCH₂CH(OH)Me, and PhCH:NC₆H₄OH in different stoichiometric ratios in anhyd. C₆H₆. The resulting derivs. polymerized on standing as indicated by their conversion to insol. and higher-melting materials. Plausible structures for the complexes are discussed.
ST lanthanide isopropoxy Schiff base; lanthanum isopropoxy Schiff base; praseodymium isopropoxy Schiff base; neodymium isopropoxy Schiff base
IT 770-37-6P 3230-45-3P 5456-01-9P 56147-66-1P 56147-68-3P
56147-70-7P 56147-72-9P 56147-74-1P 56147-76-3P
56147-78-5P 56147-80-9P 56147-82-1P 56147-84-3P 56147-86-5P
56147-88-7P 56147-90-1P 56147-92-3P 56147-94-5P 56147-96-7P
56147-98-9P 56148-00-6P 56148-02-8P 56148-04-0P 56148-06-2P
56148-08-4P 56148-10-8P 56226-37-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT 56147-70-7P 56147-74-1P 56147-96-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 56147-70-7 HCAPLUS
CN Praseodymium, [2-[(phenylmethylene)amino]phenolato-N,O]bis(2-propanolato)-, homopolymer (9CI) (CA INDEX NAME)
CM 1
CRN 56147-69-4
CMF C19 H24 N O3 Pr
CCI CCS



RN 56147-74-1 HCAPLUS
 CN Lanthanum, [2-[(phenylmethylene)amino]phenolato-N,O]bis(2-propanolato)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

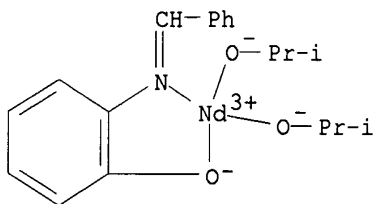
CRN 56147-73-0
 CMF C19 H24 La N O3
 CCI CCS



RN 56147-96-7 HCAPLUS
 CN Neodymium, [2-[(phenylmethylene)amino]phenolato-N,O]bis(2-propanolato)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 56147-95-6
 CMF C19 H24 N Nd O3
 CCI CCS



L12 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2003 ACS
 AN 1974:55432 HCAPLUS
 DN 80:55432
 TI Zirconium(IV) derivatives of monofunctional bidentate Schiff bases
 AU Gupta, S. R.; Tandon, J. P.
 CS Chem. Dep., Univ. Rajasthan, Jaipur, India
 SO Bulletin de l'Academie Polonaise des Sciences, Serie des Sciences

Chimiques (1973), 21(12), 911-16
 CODEN: BAPCAQ; ISSN: 0001-4095

DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)

AB Zr(OPr-iso)₄-xLx (LH = benzylidene-2-hydroxyethylamine, benzylidene-2-hydroxypropylamine, salicylideneaniline, .beta.-hydroxynaphthylideneaniline, and benzylidene-o-aminophenol; x = 1-4) were prepd. by allowing Zr(OPr-iso)₄.iso-PrOH to react with the appropriate Schiff bases in 1:1, 1:2, 1:3, or 1:4 molar ratios. Some tentative structures are proposed based on mol. assocn. and ir spectral studies.

ST zirconium isopropoxide Schiff base

IT Schiff bases
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (zirconium complexes)

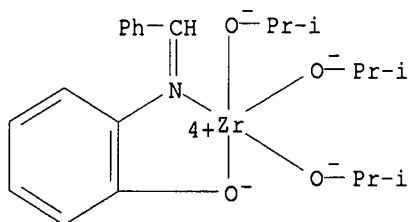
IT 51133-57-4P 51133-58-5P
 RL: FORM (Formation, nonpreparative); PREP (Preparation)
 (formation of, in equil. with trimer)

IT 51120-99-1P 51133-59-6P 51133-60-9P **51133-61-0P**
 51133-62-1P 51133-63-2P 51133-64-3P 51133-65-4P 51133-66-5P
 51133-67-6P 51133-68-7P 51717-14-7P 51717-15-8P 51717-16-9P
 51717-17-0P 51717-18-1P 51764-50-2P 51764-51-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

IT **51133-61-0P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 51133-61-0 HCAPLUS

CN Zirconium, [2-[(phenylmethylene)amino]phenolato-N,O]tris(2-propanolato)-(9CI) (CA INDEX NAME)



L12 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2003 ACS

AN 1971:3374 HCAPLUS

DN 74:3374

TI Titanium(IV) complexes of monofunctional bidentate Schiff bases

AU Gupta, S. R.; Tandon, J. P.

CS Chem. Lab., Univ. Rajasthan, Jaipur, India

SO Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie, Biochemie, Biophysik, Biologie (1970), 25(10), 1090-4
 CODEN: ZENBAX; ISSN: 0044-3174

DT Journal
 LA English
 CC 25 (Noncondensed Aromatic Compounds)

AB Title complexes, e.g. LxTi(OPr-iso)₄-x [I, where L = PhCH:NC₆H₄O-o, PhN:CHC₆H₄O-o, PhCH:N-(CH₂)₂O-, PhCH:NCH₂CHMeO-, or .beta.-hydroxynaphthyl-

methylenedianiline anion; and $x = 1-4$] were prepd. by refluxing $\text{Ti}(\text{OPr-iso})_4$ and LH in 1:1-4 molar ratios in anhyd. C_6H_6 . Detns. of ir spectra (400-3400 cm^{-1}) and mol. wts. of I indicated the formation of chelates with coordination no. 5 or 7 for the central Ti atom.

ST titanium Schiff bases complexes; Schiff bases titanium complexes; complexes titanium Schiff bases; chelates titanium Schiff bases; isopropoxy titanium Schiff bases chelates; IR titanium Schiff bases chelates; coordination titanium anils complexes; anils titanium chelates

IT Spectra, infrared
(of Schiff bases and titanium Schiff base complexes)

IT Schiff bases
RL: RCT (Reactant); RACT (Reactant or reagent)
(titanium complexes, ir spectrum of)

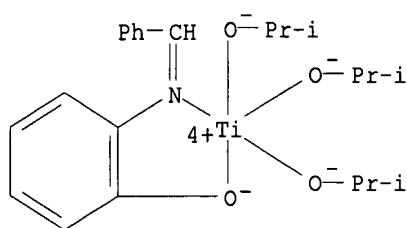
IT 2-Naphthol, 1-(N-phenylformimidoyl)-, titanium complexes
2-Propanol, 1-(benzylideneamino)-, titanium complexes
Ethanol, 2-(benzylideneamino)-, titanium complexes
Phenol, o-(N-phenylformimidoyl)-, titanium complexes
Phenol, o-(benzylideneamino)-, titanium complexes
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT 731-90-8P 770-37-6P 779-84-0P 3230-45-3P 5456-01-9P 30178-12-2P
30178-13-3P 30178-14-4P 30178-15-5P 30305-37-4P 30305-38-5P
30305-39-6P 30305-40-9P 30632-88-3P 30632-89-4P 30632-90-7P
30632-91-8P 30632-92-9P 30632-93-0P 30632-94-1P
30632-95-2P 30636-35-2P 30754-00-8P 30771-99-4P 31871-56-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT **30632-91-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 30632-91-8 HCAPLUS

CN Titanium, [o-(benzylideneamino)phenolato]triisopropoxy- (8CI) (CA INDEX NAME)



L12 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2003 ACS

AN 1970:466703 HCAPLUS

DN 73:66703

TI Chemistry of methyltitanium trichloride. Synthesis, properties, infrared spectra, and variable temperature nuclear magnetic resonance spectra of adducts of methyltitanium trichloride with symmetrical bidentate ligands

AU Clark, Robin J. H.; McAlees, A. J.

CS William Ramsay Lab., Univ. Coll., London, UK

SO Journal of the Chemical Society [Section] A: Inorganic, Physical, Theoretical (1970), (12), 2026-33
CODEN: JCSIAP; ISSN: 0022-4944

DT Journal

LA English
 CC 29 (Organometallic and Organometalloidal Compounds)
 AB A series of complexes of MeTiCl_3 with the general formula MeTiCl_3 . B was prepd. with the bidentate ligands (B) 1,2-dimethoxyethane, N,N,N',N'-tetramethylethylenediamine, 2,5-dithiahexane, 1,2-bisdiphenylphosphinoethane, N,N,N',N'-tetramethyl-o-phenylenediamine and N,N'-dimethyl-o-anisidine. The adducts are air- and moisture-sensitive solids, which decomp. on storage in vacuo at ambient temp. The thermal decompn. and oxidn. of these complexes were investigated in an attempt to elucidate the factors affecting the reactivity of the Ti-C bond. The latter reaction gave the corresponding adducts of MeOTiCl_3 , $\text{TiCl}_3\text{MeO.B.}$ Variable temp. N.M.R. studies of the MeTiCl_3 complexes suggest that these prefer to adopt the meridional configuration.

ST methyltitanium trichloride complexes; titanium methyl trichloride complexes

IT Nuclear magnetic resonance
 Spectra, infrared
 (of methyltitanium trichloride bidentate complexes)

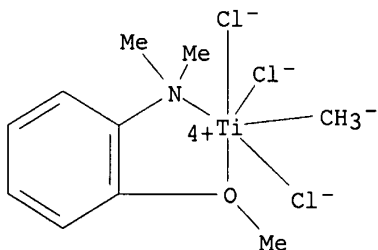
IT Ethane, 1,2-bis(methylthio)-, titanium complexes
 Ethane, 1,2-dimethoxy-, titanium complexes
 Ethylenediamine, N,N,N',N'-tetramethyl-, titanium complexes
 Phosphine, ethylenebis[diphenyl-, titanium complexes
 o-Anisidine, N,N-dimethyl-, titanium complexes
 o-Phenylenediamine, N,N,N',N'-tetramethyl-, titanium complexes
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

IT 27679-40-9P 27679-41-0P 27679-42-1P **27679-43-2P**
 27964-25-6P 29421-11-2P 29421-12-3P 29421-13-4P 29421-14-5P
 32237-69-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

IT 2747-38-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with bidentate ligands)

IT **27679-43-2P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 27679-43-2 HCAPLUS
 CN Titanium, trichloro(N,N-dimethyl-o-anisidine)methyl-, stereoisomer (8CI)
 (CA INDEX NAME)



L12 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2003 ACS
 AN 1966:488111 HCAPLUS
 DN 65:88111

OREF 65:16479g-h

TI The complex formation of anhydrous titanium(III) chloride with primary mono- and diamines

AU Prasad, Sarju; Devi, Shyamala

CS Banaras Hindu Univ., Varanasi

SO J. Indian Chem. Soc. (1966), 43(7), 495-8

DT Journal

LA English

CC 14 (Inorganic Chemicals and Reactions)

AB Complexes of formula $TiCl_3 \cdot 2L_1 \cdot X$ and $TiCl_3 \cdot L_2 \cdot X$, where L_1 is a primary monoamine, L_2 is a primary diamine, and X is EtOAc, were prepd. by the addn. of a $TiCl_3$ soln. to a slight excess of an amine soln., filtration, and drying under vacuum. The monoamines used were .alpha.- and .beta.-naphthylamine, o-, p-, and m-anisidine, o-, p-, and m-toluidine, o- and p-phenetidine, $PhNH_2$, benzylamine, and p-xylylidine. The diamines used were o-, p-, and m-phenylenediamine, benzidine, o-toluidine, and o-dianisidine. The complexes were generally insol. in org. solvents and decompd. readily in H_2O .

IT 1-Naphthylamine, titanium complex with Et acetate

2-Naphthylamine, titanium complex with Et acetate

Aniline, reaction products with HCHO, titanium complex with Et acetate

Benzidine, titanium complex with Et acetate

Benzidine, 3,3'-dimethoxy-, titanium complex with Et acetate

Benzidine, 3,3'-dimethyl-, titanium complex with Et acetate

Benzylamine, titanium complex with Et acetate

Xylylidine, titanium complex with Et acetate

m-Anisidine, titanium complex with Et acetate

m-Phenylenediamine, titanium complex with Et acetate

m-Toluidine, titanium complex with Et acetate

o-Anisidine, titanium complex with Et acetate

o-Phenetidine, titanium complex with Et acetate

o-Phenylenediamine, titanium complex with Et acetate

o-Toluidine, titanium complex with Et acetate

p-Anisidine, titanium complex with Et acetate

p-Phenetidine, titanium complex with Et acetate

p-Phenylenediamine, titanium complex with Et acetate

p-Toluidine, titanium complex with Et acetate

IT 15642-28-1, Titanium, trichloro(ethyl acetate)bis(1-naphthylamine)-

15642-29-2, Titanium, trichloro(ethyl acetate)bis(2-naphthylamine)-

15642-30-5, Titanium, trichloro(ethyl acetate)bis(o-toluidine)-

15642-31-6, Titanium, trichlorobis(o-anisidine)(ethyl acetate)-

15642-32-7, Titanium, trichlorobis(p-anisidine)(ethyl acetate)-

15642-33-8, Titanium, trichlorobis(m-anisidine)(ethyl acetate)-

15642-34-9, Titanium, trichloro(ethyl acetate)bis(p-toluidine)-

15664-96-7, Titanium, trichloro(ethyl acetate)bis(m-toluidine)-

15664-97-8, Titanium, trichloro(ethyl acetate)bis(o-phenetidine)-

15740-46-2, Titanium, trichloro(ethyl acetate)bis(p-phenetidine)-

15740-47-3, Titanium, trichlorobis(aniline)(ethyl acetate)- 15740-48-4,

Titanium, trichlorobis(benzylamine)(ethyl acetate)- 15803-76-6,

Titanium, trichloro(ethyl acetate)(m-phenylenediamine)- 15820-74-3,

Titanium, trichloro(3,3'-dimethylbenzidine)(ethyl acetate)- 16050-47-8,

Titanium, trichloro(ethyl acetate)(p-phenylenediamine)- 16050-48-9,

Titanium, trichloro(benzidine)(ethyl acetate)- 30141-53-8, Titanium,

trichloro(ethyl acetate)bis(xylylidine)- 94648-99-4, Titanium,

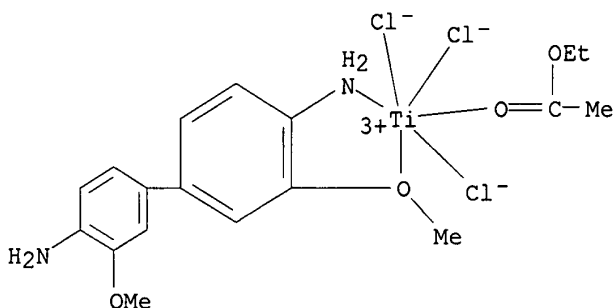
trichloro(ethyl acetate)(o-phenylenediamine)- **98397-55-8**,

Titanium, trichloro(3,3'-dimethoxybenzidine)(ethyl acetate)-

(prepn. of)

IT **98397-55-8**, Titanium, trichloro(3,3'-dimethoxybenzidine)(ethyl

acetate)-
 (prepn. of)
 RN 98397-55-8 HCAPLUS
 CN Titanium, trichloro(3,3'-dimethoxybenzidine)(ethyl acetate)- (7CI) (CA
 INDEX NAME)



L12 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2003 ACS
 AN 1965:401502 HCAPLUS
 DN 63:1502
 OREF 63:235e-g
 TI Complexes with diaminobiphenyl derivatives. XII. Combinations of zirconyl chloride with tolidine and dianisidine
 SO Acad. Rep. Populare Romine Filiala Cluj, Studii Cercetari Chim. (1963) 251-63
 DT Journal
 LA Unavailable
 CC 14 (Inorganic Chemicals and Reactions)
 AB cf. CA 61, 14162h. Complex combinations between quadrivalent elements and diaminobiphenyl derivs. were obtained by the addn. of a concd. soln. of the salt of the quadrivalent element in MeOH to an Et2O soln. of the diaminobiphenyl deriv. By changing the concns. and the molar ratios between the components, different complexes were obtained. The tolidine complexes have a weak beige color, while those of the dianisidine are gray-blue-violet. They are generally microcryst. powders, little sol. in the usual org. solvents and hydrolyze in water. The thermogravimetric and thermodifferential curves resemble each other, but are not identical. A spectroscopic study in the uv has been done, but the results are not conclusive. A qual. comparison of x-ray measurements shows that the spectra of the synthesized substances are different from each other as well as when compared to the spectra of the components. Also their chem. analyses vary from one substance to another and their compn. might be formulated by: $x(\text{ZrOCl}_2) \cdot y \text{ base} \cdot z \text{ H}_2\text{O}$, when x and y vary from 1 to 5, and z from 0 to 16. The structure is a linear polymeric one, alternating a metal unit and a basic unit.
 IT Spectra, visible and ultraviolet
 (of benzidine complexes with zirconyl chloride)
 IT Molecular structure
 Spectra, visible and ultraviolet
 (of zirconyl chloride complexes with 3,3'-dimethoxybenzidine or 3,3'-dimethylbenzidine)
 IT Benzidine, zirconium complex
 Benzidine, 3,3'-dimethoxy-, zirconium complex
 Benzidine, 3,3'-dimethyl-, zirconium complex

IT Zirconium, dioxotetrachlorobis(3,3'-dimethylbenzidine)di-
 12150-04-8, Zirconium, trioxohexachlorobis(3,3'-dimethoxybenzidine)tri-
 12151-08-5, Zirconium, dioxotetrachlorotris(3,3'-dimethylbenzidine)di-
 12151-09-6, Zirconium, tetraoxooctachlorotris(3,3'-
 dimethoxybenzidine)tetra- 12151-35-8, Zirconium,
 pentaaxodecachlorotetrakis(3,3'-dimethoxybenzidine)penta- 14837-45-7,
 Zirconium, tetraoxooctachloropentakis(3,3'-dimethylbenzidine)tetra-
 15002-42-3, Zirconium, dioxotetrachloro(3,3'-dimethylbenzidine)di-
97087-04-2, Zirconium, oxodichloro(3,3'-dimethoxybenzidine)-
 97087-05-3, Zirconium, oxodichloro(3,3'-dimethylbenzidine)-
 (prepn. of)
 IT **97087-04-2**, Zirconium, oxodichloro(3,3'-dimethoxybenzidine)-
 (prepn. of)
 RN 97087-04-2 HCAPLUS
 CN Zirconium, oxodichloro(3,3'-dimethoxybenzidine)- (7CI) (CA INDEX NAME)

